



# ANGLED GRIPPING JOINT COMBINATION FOR SUPPORT STRUCTURES

## CLAIMS

I claim: .

1529. An angled gripping joint combination for support structures, comprising a U-beam top joint with lumber end gripping means gripper and a U-beam splay bar for use with a pair of lumber legs and a lumber cross-beam, the U-beam top joint having a side U-beam and a side flatbracket beam joining a pair of spaced inward facing end brackets, ~~each such bracket in conjunction with each, each such spaced inward facing end bracket together with a portion of the side U-beam and a portion of the side bracket beam being adapted to~~ abut three sides of a lumber leg while allowing a fourth side of the lumber leg free to pivot away from the bracket until pressing a top edge of the fourth side against the lumber cross-beam when the lumber cross-beam is positioned on the side beams, each such bracket having an inward facing lumber leg pivot surface that is at an obtuse angle with respect to a top surface of the side bracket beams, the U-beam splay bar having at each end thereof a spaced pair of outward facing end brackets, each having an outward facing lumber

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leg guiding surface that is fixed with respect to the bar at  
a like obtuse angle to that of the inward facing leg  
pivot surface end bracket with respect to the top surface of the side  
bracket beams.

21630. The angled gripping joint combination of Claim 1529, in which there are side  
enclosing brackets affixed to the side beam of the U-beam  
top joint.

331. The angled gripping joint combination of Claim 1529, in which there are side  
enclosing brackets affixed to a side of the U-beam splay  
bar.

41832. The angled gripping joint combination of Claim 1529, in which there are side  
enclosing brackets affixed to the side beam of the U-beam  
top joint and side enclosing brackets affixed to a side of  
the U-beam splay bar.

51933. The angled gripping joint combination of Claim 41832, in which the outward facing  
brackets each have a pair of parallel flanks extending  
perpendicular along one flank each on opposite sides of each of and extending perpendicular to  
the outward

facing lumber leg guiding surfaces.

62034. The angled gripping joint combination of Claim 51933, in which the parallel flanks have holes through which a retaining nail could be inserted into a lumber leg.

72135. ~~FA sawhorse combination comprising assembly including a pair of the angled~~the gripping joint combination of Claim 6, ~~comprising a second combination of the U-beam top joint with lumber end gripping means and the U-beam splay bar~~2034, a lumber cross-beam, and four lumber legs.

92336. The combination of ~~two sets~~a pair of the ~~sawhorse joint combination assemblies~~ of Claim 72135, in which two of the four top joints have a support ledge formed by a U-beam to which a chopsaw base can be bolted.

1137. ~~The sawhorse assembly of of Claim 735, comprising additionally a set of four longer legs of lumber,~~12four additional lumber legs, each additional lumber leg being longer than each of the four lumber legs.

1338. ~~FA pair of the sawhorse assemblies of~~  
Claim 735 aligned width-wise and joined by lumber lengths

inserted perpendicular to the lumber cross-beams through  
aligned side enclosing brackets on the respective sets.

~~142839. The~~ combination of multiple sets of Claim 7, in which a  
~~in which a multiplicity of the angled gripping joint combination of Claim 2135 form a bench and~~  
table structure is formed by ~~with~~ lumber lengths  
inserted through side enclosing brackets affixed to side  
beams of U-beam top joints of at least one bench structure  
and inserted through side enclosing brackets affixed to  
sides of U-beam splay bars of at least one table structure  
aligned therewith.